| Essential Learning | # | Components | Suggested | |
| --- | --- | --- | --- | --- |
| Activities | Assessments |
| **VCS T 4.1 Understand the ethical, cultural, and societal issues related to technology**  AK Standard: E1, E2, E3, E4, E5, E6, E7, E8  ISTE Standard: 5a, 5b, 5c, 5d | VCS 4.1.1 | Evaluate ways that technology impacts culture and the environment | Compare and contrast the uses of technology in the home, workplace, and school using a Venn diagram  Describe how technology has changed one’s own culture (i.e. social networking, the internet, communication, etc.) | Teacher observation  Skills checklist |
|  | VCS 4.1.2 | Practice responsible use of technology systems, information, and software | Explain why the Acceptable Use Policy is necessary  Understand the principles of “netiquette” and personal safety on the internet, and identify specific information that should not be shared  Discuss consequences of misuse or abuse of technology  View and discuss online technology ethics story |
|  | VCS 4.1.3 | Develop positive attitudes towards technology use that supports lifelong learning, collaboration, personal pursuits, and productivity | Use the school and teacher web pages to access school related information about activities, assignments, and grades  Play online skill-building games with peers |
| **VCS T 4.2 Utilize basic input devices**  AK Standard: A1  ISTE Standard: 6a | VCS  4.2.1 | Use appropriate mouse skills | Determine when a point, click, drag, drag-and-drop, double-click, or triple-click is necessary to accomplish a task  Demonstrate right-click and/or control-click  Drag-and-drop highlighted text  Recognize mouse icons: I-beam, arrow, double-headed arrow, four-headed arrow, active link, wait icon | Teacher observation  Oral quiz  Skills checklist  Rubric  Typing program results  Keyboarding quiz  Project Rubric |
|  | VCS 4.2.2 | Use appropriate keyboarding skills and techniques | Apply the keyboard shortcuts for save, quit, logout, and new    Demonstrate appropriate keyboard posture while keeping eyes on the monitor  Practice keying words and phrases using the home row, QWERTY row, and ZXCVB row using the correct reaches  Key at 90% accuracy rate at 20 words per minute by the end of the year  Key rhythmically |
|  | VCS  4.2.3 | Use the keyboard to provide input to applications, software, and the internet | Create typewritten documents and reports, i.e. state report  Navigate and input text into spreadsheet cells  Enter text in a search engine to locate information or a URL  Create keyboard art using text in a drawing program |
| **VCS T 4.3 Demonstrate an understanding of technology concepts, systems, and operations**  AK Standard: A1, A2, A3, A4, A5  ISTE Standard: 6a, 6b, 6c, 6d | VCS 4.3.1 | Recognize, define, and use technology terms, processes and systems | Use the terms cursor, highlight, menu, dock, export, cut, copy, paste, webpage, homepage, and hyperlink appropriately  Identify the internal components of the computer: CD/DVD drive, processor, motherboard, memory, fan, power supply  Identify removable storage devices: flash drive, CD/DVD, SD cards  Understand the purpose and function of a server  Use a digital camera to take pictures and transfer photos to a photo editing program using the USB cable  Use a microphone to record audio  Recognize domain names (.com, .net, .gov, .edu, .biz, etc.) | Teacher observation  Online quiz  Skills checklist  Oral quiz  Written quiz |
|  | VCS 4.3.2 | Select and use applications effectively and productively | Use the toolbar or formatting palette to format text: bold, italic, underline, center, font size, font color, and typeface  Display toolbars to use the thesaurus/dictionary, spelling, grammar check, and view functions in programs  Effectively manage multiple open documents or windows  Use the undo and redo function within programs  Create and name folders on the desktop and within other folders  Rename and save pictures from the internet onto the desktop using the menu  Use grade-appropriate online digital math tools  Utilize controls in Print dialog box to set number of pages, location of printer, and print preview function |
|  | VCS 4.3.3 | Diagnose and solve common technology problems | Restart or reboot computer when system freezes, locks up, or crashes, with approval from teacher  Use trial-and-error process to troubleshoot problems |
| **VCS T 4.4 Demonstrate creative thinking and innovation**  AK Standard: D1  ISTE Standard: 1a, 1b, 1c, 1d | VCS 4.4.1 | Apply knowledge to develop new products using technology | Create a mini-book for inclusion with state report (capitol, state bird, etc.)  Create an image using a drawing program and export as a .jpg file  Create a graphic diagram of ecosystems  Create a timeline to show significant events in their state’s history | Project Rubric  Skills checklist  Teacher observation |
|  | VCS 4.4.2 | Create original products to convey ideas or as personal or group expression | Create an iconic story using clipart  Write a dialog with a partner |
|  | VCS 4.4.3 | Explore issues or ideas using models or simulations | Create a diagram or model of the human respiratory system  Explore the human body using online simulations  Create a model of a soil profile |
| **VCS T 4.5 Use digital media and environments to communicate and work collaboratively**  AK Standard: D2, D3  ISTE Standard: 2a, 2b, 2c, 2d | VCS 4.5.1 | Convey ideas to a variety of audiences using digital media and tools | Create a presentation for a specific audience – teacher, parent, friend | Presentation Rubric  Teacher observation  Project Rubric |
|  | VCS 4.5.2 | Contribute to project teams to produce original works or solve problems | Meet and collaborate with peers to solve common application and technology problems |
|  | VCS 4.5.3 | Use technology to interact with others to create cultural and global awareness | Recognize and discuss telecommunications as a way to share information electronically |
| **VCS T 4.6 Apply digital tools to gather, evaluate and use information**  AK Standard: B1, B2, B3  ISTE Standard: 3b, 3c, 3d | VCS 4.6.1 | Use technology to locate, evaluate, select, and manage information and sources | Select appropriate strategies to navigate and access information for research and resource sharing  Use the library’s online card catalog to search for a resource  Conduct a limited or advanced search or image search  Navigate teacher-approved websites  Create bookmarks to save information for later retrieval | Teacher observation  Skills checklist  Project Rubric  Oral quiz |
|  | VCS 4.6.2 | Ethically use information from a variety of sources to process and present results | Follow the proper use of copyrighted materials  Understand the principles of fair use as it relates to copyrighted material  Write a report and give credit when paraphrasing or quoting sources |
|  | VCS 4.6.3 | Evaluate and select new resources and technology based on the appropriateness to specific tasks | Understand that open-source online resources may contain inaccuracies and false information  Determine the validity of an online resource by searching for information about the author |
| **VCS T 4.7 Use critical thinking skills to solve problems and make decisions**  AK Standard: C1, C2, C3  ISTE Standard: 4a, 4b, 4c, 4d | VCS 4.7.1 | Plan and conduct research for investigation of authentic problems | Use online resources (news web sites, organization web sites, etc.) to research a current event in their chosen state and give a short presentation to the class | Teacher observation  Project Rubric |
|  | VCS 4.7.2 | Plan and develop solutions individually or with others to answer a question or complete a project | Research one of the “big problems” in the world today (poverty, hunger, etc.) and develop a solution to it |
|  | VCS 4.7.3 | Derive meaning by evaluating, combining, or extending information using multiple technologies | Write a well-organized, informative state report that includes: digital images, text, a presentation, a poster, and a mini-book of state facts |